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LOUIS WOO LAW OFFICE OF LOUIS WOO 717 NORTH FAYETTE STREET ALEXANDRIA, VA 22314			TOLAN, EDWARD THOMAS	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12,25-28 and 30-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsuneda et al. (EP 0913236). Tsuneda discloses a programmable robot (1) that is arranged to grip a sheet metal wafer workpiece (20) with a gripper (4), deliver the workpiece to a positioning means (8) and further deliver the workpiece to a processing means (6). A transfer means (2) moves on slide (21) to take the robot to different locations (5,6) along a given path. Location (5) is a storage location and location (6) is a processing means. The positioning means (8) and the robot (1) are together placed on the transfer means (2) and movable therewith. Tsuneda discloses that the processing means are photo lithography, deposition and etching means, it would have been obvious to the skilled artisan at the time of invention to transfer workpieces using the means of Tsuneda to other known processing means (coating, machining, cutting) that are used to work on metal workpieces. Regarding claim 26, gravity effects the workpiece, in column 5, lines 40-50 Tsuneda discloses a suction means for positioning the workpiece as the positioning means (8) ascends.

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Claims 33-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Prunotto et al. (5,187,958). Prunotto discloses a bending press for metal sheet comprising an automated manipulator device (G), a transfer device (28) and a position and centering device (S1,S2,46). The manipulator delivers the workpiece to the positioning device, the workpiece is positioned and then the workpiece is delivered to the bending press (column 5, lines 42-65). The positioning device is movable along track (22) by transfers means (column 5, lines 18-24) along a common predetermined path (axis Y, column 4, lines 14-19).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuneda et al. (EP 0913236) in view of Kato (5,161,936). Tsuneda does not disclose a plurality of transfer means. Kato teaches a plurality of transfer means (7,8,8') that operate on a common slide. The transfer means are controllable for coordinated movement. It would have been obvious to one skilled in the art at the time of invention to provide multiple transfer means and robots in the invention of Tsuneda as taught by Kato in order to speed production. Regarding claim 14 Tsuneda states in paragraph

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[0018] that the positioning means is formed to be movable independently of the transfer means (2) and arm (3) in order to position it relatively.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuneda et al (5,004,399) in view of Sartorio (4,806,071). Tsuneda does not disclose double blank detection. Sartorio teaches that it is known to position sensors (60,61) to detect a number of blanks that are transferred. It would have been obvious to one skilled in the art at the time of invention to provide Tsuneda with blank detecting sensors as taught by Sartorio in order to determine if there is more than one workpiece gripped by the robot.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuneda et al. (EP 0913236) in view of Kato (5,161,936) and further in view of Sartorio (4,806,071). Tsuneda in view of Kato does not disclose double blank detection. Sartorio teaches that it is known to position sensors (60,61) to detect a number of blanks that are transferred. It would have been obvious to one skilled in the art at the time of invention to provide Tsuneda in view of Kato with blank detecting sensors as taught by Sartorio in order to determine if there is more than one workpiece gripped by the robot.

Claims 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuneda et al. (EP 0913236) in view of Prunotto et al. (5,187,958). Tsuneda does not disclose that the robot transfers a workpiece to a bending machine. Prunotto teaches a robot gripper (G) that transfers a workpiece to a bending machine. It would have been obvious to one skilled in the art at the time of invention to use the robot

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gripper of Tsuneda to transfer workpieces to other processing centers as taught by Prunotto.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prunotto et al. (5,187,958) in view of Sartorio (4,735,079). Prunotto does not disclose that the workpiece is effected by gravity (the workpiece is gripped at all times). Sartorio teaches that a centering and position means (16,18) is used wherein a gripper lays a workpiece on the support (18). It would have been obvious to one skilled in the art at the time of invention to lay the workpiece of Prunotto on a positioning and centering means as taught by Sartorio for single axis positioning of the workpiece.

### ***Response to Arguments***

Applicant's arguments with respect to claims 12-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Ed Tolan whose telephone number is 571-272-4525.

EDTOLAN  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Ed Tolan', is written over the printed name and title.